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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/348,980 | 07/07/1999 | LIU ZHONGDU | M-6043-US | 6056 |

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SKJERVEN MORRILL MACPHERSON LLP
25 METRO DRIVE
SUITE 700
SAN JOSE, CA 95110

EXAMINER

FLEMING, FRITZ M

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2836

DATE MAILED: 01/29/2002

#9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/348,980

Applicant(s)

ZHONGDU, LIU

Examiner

Fritz M. Fleming

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2001.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 69-114 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-68 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Fritz M. Fleming
Fritz Fleming
Patent Examiner

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. The declaration under 37 CFR 1.132 filed 12-4-2001 is insufficient to overcome the rejection of claims 1-68 based upon Covely or Evans as set forth in the last Office action because: It does not seem to address the claimed subject matter. The claimed subject matter deals with the current drawn by the control circuit and not the load in the off state. The declaration seems to be self serving in that the maker of the switch performs the test. There is no indication of the item tested correlating to the claimed limitations. No estimates are provided regarding the closest references.

2. Applicant's arguments filed 12-4-2001 have been fully considered but they are not persuasive. It is to be noted that applicant tries to argue that the references cited by the examiner are not switches because of limitations not embraced by the claims. A switch provides an on/off function regardless of waveforms and the like, unless applicant desires to claim these extraneous features. The added claimed limitation to claim 1 is a relative term...substantially cut off in Coveley is addressed at the bottom of column 4 in that leakage can be reduced and column 5 addresses the elimination of leakage through the load, indicating a complete cut off as no load leakage means that none is drawn by the control circuitry. Note that 1 is a solid state switch. In the case of Evans, the switch is solid state, i.e. 19. Column 9 addresses the use of 200 micro amps, which compared to an "on" current through the load, is substantially cut off. Column 11 addresses an insignificant current flowing through the load compared to operate the load. Thus it is substantially cut off. Thus the rejections hold. Regarding the taking of official notice, the applicant is demanding that the examiner produce references that teach the object of the taking in conjunction with a solid state electrical

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switch. If the examiner had such a combination, then anticipation would have been in order. The examiner took official notice that the details are well known, not that it is well known to have such in combination with a solid state electrical switch. The applicant admits on the record that some are known at page 12 of the response. Thus the examiner will produce references when the challenge is correct. The examiner did not confuse mechanical touch switches with what is claimed as many touch panels for dimmer control are capacitive. Again, references will be produced when the challenge is made of what the examiner took official notice of. Coveley's R is used for the current detection in an overload current detector 3, not the protection itself. The detector 3 then controls 4 and solid state switch 1 per the material spanning columns 2-3. Regarding claim 4, a delay angle can include zero delay.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-8,19,27,28,29,30,33,34,67 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Coveley as provided by applicant. See Figures 1 and 2.
3. Claims 1-6,19,27,28,29,30,32-34,67 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Evans. See Figure 1.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 9-18,20-26,31,32,35-66,68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coveley.

Coveley sets forth a control circuit 4 but suggests that such provide the desired gating, but not specifically a touch switch. A touch switch falls under the broad concepts set forth at the bottom of col. 2 and the claimed details are well known in the art. The examiner takes official notice of the well known features of touch panels. Thus such is obvious subject matter as Coveley teaches that the control circuit provide the desired gating. As far as gain circuits are concerned, such are well known in the art for adjusting signal strengths and the amount of gain is determined by the parameters at hand. Initialization is well known in the art so that the device always starts up in a predictable manner when initially turned on or after a power failure. The amount and type of rectification is determined by power requirements. Note that R is used for overcurrent protection. More elaborate protection circuits are well known and the examiner takes official notice of such. The claimed details of zero crossing circuits, audio circuits, and optocoupling are likewise well known in the art, and the examiner takes official notice of such.

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6. Claims 7-18,20-26,31,35-66,68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans.

Evans sets forth initialization circuitry so as to ensure proper operations under various initialization circumstances. Protection is provided at 17 and thus to use different protection schemes that are well known in the art is obvious subject matter. The details of control logic 38 are not set forth. Thus any suitable control logic will suffice to provide the desired signals. As far as gain circuits are concerned, such are well known in the art for adjusting signal strengths and the amount of gain is determined by the parameters at hand. The claimed details of zero crossing circuits, audio circuits, and optocoupling are likewise well known in the art, and the examiner takes official notice of such.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fritz M. Fleming whose telephone number is 703.308.1483. The examiner can normally be reached on M-F 0630-1500.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Josie Ballato can be reached on 703.308.0269. The fax phone numbers for the organization where this application or proceeding is assigned are 703.308.7722 for regular communications and 703.308.7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.1782.


Fritz M. Fleming
Primary Patent Examiner
Art Unit 2836

ff
January 28, 2002